

Claims:

1. A coating composition comprising an effect pigment, a small particle size pigment and at least one flop-enhancing agent selected from the group consisting of optionally substituted halogenated copper phthalocyanines, indanthrones and carbazole dioxazines.
- 5 2. A coating composition of claim 1, wherein the composition comprises mixtures having more than one flop-enhancing agent selected from the group consisting of optionally substituted halogenated copper phthalocyanines, indanthrones and carbazole dioxazines.
3. A coating composition of claim 1, wherein at least one flop-enhancing agent is a halogenated copper phthalocyanine compound with one or more substituents selected from the group consisting of $-NR_1R_2$, C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are
10 independently hydrogen, C_1-C_{10} alkyl or $-X-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene.
4. A coating composition of claim 3, wherein at least one flop-enhancing agent is an indanthrone with one or more substituents selected from the group consisting of halogen,
15 $-NR_1R_2$, C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are independently hydrogen, C_1-C_{10} alkyl or $-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene.
5. A coating composition of claim 3, wherein at least one flop-enhancing agent is a carbazole dioxazine with one or more substituents selected from the group consisting of halogen,
20 $-NR_1R_2$, C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are independently hydrogen, C_1-C_{10} alkyl or $-X-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene.
6. A coating composition of claim 1, comprising at least one halogenated copper phthalocyanine, an indanthrone and a carbazole dioxazine compound, each of which are
25 unsubstituted or have one or more substituents selected from the group consisting of halogen, $-NR_1R_2$, C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are independently hydrogen, C_1-C_{10} alkyl or $-X-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene.
7. A coating composition of claim 1, wherein the small particle size pigment is a
30 1,4-diketo-3,6-diaryl-pyrrolopyrrole, a quinacridone, a quinacridonequinone or a solid solution

pigment.

8. A coating compositions of claim 7, wherein the small particle size pigment is selected from the group consisting of β -quinacridone, 2,9-dichloroquinacridone, 2,9-dimethylquinacridone, 1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole,
- 5 1,4-diketo-3,6-di(biphenyl-1-yl)-pyrrolo[3,4-c]pyrrole, 2,9-dichloroquinacridone/1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole solid solution, and 2,9-dichloroquinacridone/1,4-diketo-3,6-diphenyl-pyrrolo[3,4-c]pyrrole/1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole solid solution of specific surface area from 40 to 100 m²/g, and at least one of the flop-enhancing agents is a halogenated copper
- 10 phthalocyanine, indanthrone or carbazole dioxazine compound, wherein the benzene rings of the flop-enhancing agents are unsubstituted or substituted by one or more substituents selected from the group consisting of halogen, -NR₁R₂, C₁-C₁₀alkyl and -X-NR₁R₂, wherein R₁ and R₂ are independently hydrogen, C₁-C₁₀alkyl or -X-NR₁R₂, R₁ and R₂ are independently hydrogen or C₁-C₁₀alkyl, and X is C₁-C₁₀alkylene.
- 15 9. A coating composition of claim 8, wherein the small particle size pigment is a 2,9-dichloroquinacridone/1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole solid solution and at least one flop-enhancing agent is a halogenated copper phthalocyanine compound.
10. A pigment composition which comprises a transparent pigment and from 0.1 to 10% by weight, based on the weight of the composition, of at least one flop-enhancing agent selected
- 20 from the group consisting of halogenated copper phthalocyanine, indanthrone or carbazole dioxazine compounds or mixtures thereof, wherein the benzene rings of the flop-enhancing indanthrone or carbazole dioxazine agents are unsubstituted or substituted by one or more substituents selected from halogen, -NR₁R₂, C₁-C₁₀alkyl and -X-NR₁R₂, wherein R₁ and R₂ are independently hydrogen, C₁-C₁₀alkyl or -X-NR₁R₂, R₁ and R₂ are independently hydrogen or
- 25 C₁-C₁₀alkyl, and X is C₁-C₁₀alkylene.
11. A pigment composition of claim 10, wherein at least one flop-enhancing agent is a halogenated copper phthalocyanine wherein the benzene rings of the flop-enhancing agent are unsubstituted or substituted by one or more substituents selected from the group consisting of -NR₁R₂, C₁-C₁₀alkyl and -X-NR₁R₂, wherein R₁ and R₂ are independently hydrogen,
- 30 C₁-C₁₀alkyl or -X-NR₁R₂, R₁ and R₂ are independently hydrogen or C₁-C₁₀alkyl, and X is C₁-C₁₀alkylene.
12. A pigment composition of claim 11, further comprising a second flop-enhancing agent,

wherein the second flop-enhancing agent is an indanthrone, wherein the benzene ring of the flop-enhancing indanthrone is unsubstituted or substituted by one or more substituents selected from the group consisting of halogen, $-NR_1R_2$, C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are independently hydrogen, C_1-C_{10} alkyl or $-X-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene.

13. A pigment composition of claim 11, further comprising a second flop-enhancing agent wherein the second flop-enhancing agent is carbazole dioxazine, wherein the benzene ring of the flop-enhancing carbazole dioxazine is unsubstituted or substituted by one or more substituents selected from the group consisting of halogen, $-NR_1R_2$, C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are independently hydrogen, C_1-C_{10} alkyl or $-X-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene.

14. A pigment composition of claim 10, comprising a halogenated copper phthalocyanine, an indanthrone and at least one carbazole dioxazine compound flop-enhancing agents, wherein the benzene rings of the indanthrone and carbazole dioxazine flop-enhancing agents are unsubstituted or substituted by one or more substituents selected from the group consisting of halogen, $-NR_1R_2$, C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are independently hydrogen, C_1-C_{10} alkyl or $-X-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene, wherein the benzene ring of the halogenated copper phthalocyanine flop-enhancing agent is unsubstituted or substituted by one or more substituents selected from the group consisting of NR_1R_2 , C_1-C_{10} alkyl and $-X-NR_1R_2$, wherein R_1 and R_2 are independently hydrogen, C_1-C_{10} alkyl or $-X-NR_1R_2$, R_1 and R_2 are independently hydrogen or C_1-C_{10} alkyl, and X is C_1-C_{10} alkylene.

15. A pigment composition of claim 10, wherein the transparent pigment is a 1,4-diketo-3,6-diaryl-pyrrolopyrrole, a quinacridone, a quinacridonequinone or a solid solution pigment.

16. A pigment composition of claim 10, further comprising an effect pigment.

17. A pigment composition of claim 15 wherein the transparent pigment is β -quinacridone, 2,9-dimethylquinacridone, 1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole, 1,4-diketo-3,6-di(biphenyl-1-yl)-pyrrolo[3,4-c]pyrrole, 2,9-dichloroquinacridone/1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole solid solution or 2,9-dichloroquinacridone/1,4-diketo-3,6-diphenyl-pyrrolo[3,4-c]pyrrole/1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole solid solution.

18. A pigment composition of claim 17, wherein the transparent pigment is a 2,9-dichloroquinacridone/1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole solid solution and the flop-enhancing agent is Pigment Green 7.
19. A pigment composition of claim 17, wherein the transparent pigment is 2,9-dichloroquinacridone/1,4-diketo-3,6-di(4-chlorophenyl)-pyrrolo[3,4-c]pyrrole solid solution and the flop-enhancing agent is Pigment Green 36.
20. A pigment composition of claim 15, which further comprises a rheology improving agent selected from the group consisting of pyrazolylmethylquinacridone, aluminum quinacridone monosulfonate and mixtures thereof.
21. A method of enhancing the flop of a polymeric coating containing an effect pigment and a transparent pigment, which comprises incorporating a flop-enhancing agent into the polymeric coating, wherein the flop-enhancing agent is selected from the group consisting of halogenated copper phthalocyanine, indanthrone or carbazole dioxazine compounds or mixtures thereof.
22. A coating composition of claim 1, wherein the effect pigment is selected from the group consisting of coated micas, uncoated micas, aluminum flakes, multilayered color shifting flake pigments, and graphite flakes.